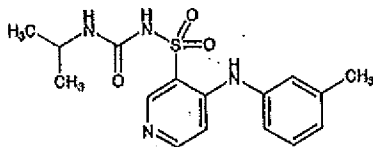


mp 108-110°. Citrate, $C_{26}H_{23}ClNO \cdot C_6H_5O_7$, FC-1157a, Fareston. mp 160-162°.

THERAP CAT: Antiestrogen; antineoplastic.

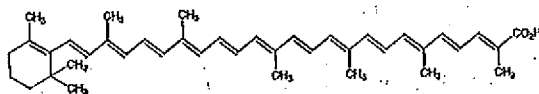
9689, Toril Oil. From the fruit of *Torilis anthriscus* (L.) Gmel., Umbelliferae. A Japanese folk remedy for ascariasis. It is relatively non-toxic for higher animals and very toxic for Lumbrius, leech and ascaris.

9690, Torsemide. *N-[(1-Methylethyl)amino]carbonyl-4-[(3-methylphenyl)amino]-3-pyridinesulfonamide*; 1-isopropyl-3-[(4-m-toluidino-3-pyridyl)sulfonyl]urea; 3-isopropylcarbamylsulfonamido-4-(3'-methylphenyl)aminopyridine; torasemide; AC-4464; BM-02015; JDL-464; Demadex; Toradilur; Torem; Unat. $C_{16}H_{20}N_4O_5S$; mol wt 348.43. C 55.16%, H 5.79%, N 16.08%, O 13.78%, S 9.20%. Sulfonamide loop diuretic. Prepn: J. E. DeLarge et al.; Ger. pat. 2,516,025; *idem*, U.S. pat. 4,018,929 (1975, 1977 both to A. Christiaens, S.A.); J. DeLarge, C. L. Lapiere, *Ann. Pharm. Fr.* 36, 369 (1978). Pharmacokinetics in humans: M. Lesne et al., *Int. J. Clin. Pharmacol. Ther. Toxicol.* 20, 382 (1982). Preliminary evaluation in acute heart failure: R. Stroobandt et al., *Arch. Int. Pharmacodyn.* 260, 151 (1982). Clinical pharmacology: D. C. Brater et al., *Clin. Pharmacol. Ther.* 42, 187 (1987). Series of articles on pharmacology, mode of action and renal effects in animals: *Arzneimittel-Forsch.* 35, 1520-1541 (1985); on pharmacology, pharmacokinetics and clinical studies: *Eur. J. Clin. Pharmacol.* 31, Suppl., 1-55 (1986); *Arzneimittel-Forsch.* 38, 143-214 (1988).



mp 163-164°. pKa 6.44. THERAP CAT: Diuretic.

9691, Torularhodin. 3',4'-Didehydro- β,ψ -caroten-16'-oic acid. $C_{60}H_{82}O_2$; mol wt 564.85. C 85.06%, H 9.28%, O 5.66%. Carotenoid pigment found in *Torula rubra* and *Rhodotorula mucilaginosa* yeasts. Isolat: Karrer, Rutschmann, *Helv. Chim. Acta* 26, 2109 (1943). Structure and synthesis: Isler et al., *ibid.* 42, 864 (1959).

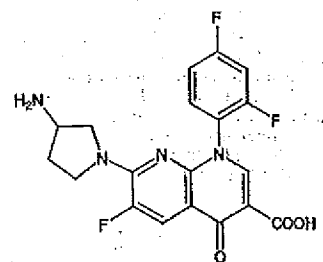


Fine dark purple needles from methanol + ether or toluene, mp 210-212° (vac, some decompn). Absorption max in CS_2 : 582, 541, 502 nm; in methanol: 529, 493, 460 nm. Freely sol in carbon disulfide, chloroform, pyridine; less sol in ether, benzene, hot ethanol; sparingly sol in methanol. Practically insol in petr ether.

Methyl ester, $C_{61}H_{84}O_2$, dark red needles from benzene + methanol; mp 172-173°.

9692, Tosufloxacin. 7-(3-Amino-1-pyrrolidinyl)-1-(2,4-difluorophenyl)-6-fluoro-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid; A-61827. $C_{19}H_{15}F_3N_4O_5$; mol wt

404.35. C 56.44%, H 3.74%, F 14.10%, N 13.86%, O 11.87%. Trifluorinated quinolone antibacterial. Prepn: H. Narita et al., Ger. pat. 3,514,076, C.A. 104, 129888r (1986); Belg. pat. 904,086, C.A. 105, 208850w (1986); Y. Todo et al., U.S. pat. 4,704,459 (1985, 1985, 1987 all to Toyama); and activity: D. T. W. Chu et al., *J. Med. Chem.* 29, 2363 (1986); H. Narita et al., *Yakugaku Zasshi* 106, 802 (1986), C.A. 106, 196291v (1987). *In vitro* activity studies of the base: P. B. Fernandes et al., *Antimicrob. Ag. Chemother.* 32, 27 (1988); and *in vivo* animal studies of the toluenesulfonate: M. Takahata et al., *J. Antimicrob. Chemother.* 22, 143 (1988). Series of articles on antibacterial activity and clinical evaluation of the toluenesulfonate: *Chemotherapy (Tokyo)* 36, Suppl. 9, 1-1538 (1988).



Hydrochloride, $C_{19}H_{15}F_3N_4O_5 \cdot HCl$, A-60969. Crystals from conc HCl-ethanol (1:3), mp 247-250° (dec).

Toluenesulfonic acid salt monohydrate, $C_{19}H_{15}F_3N_4O_5 \cdot C_6H_4SO_3H_2O$, tosufloxacin tosylate, A-64730, T-3262, Oux, Tosuxacin. mp 258-260°.

THERAP CAT: Antibacterial.

9693, Toxaphene. Chlorinated camphene; camphenchlor; polychlorocamphene; Hercules 3956; Alltox; Geniphene; Motox; Phenacide; Phenatox; Strobane-T; Toxakill. A very complex, but reproducible mixture of at least 177 C_{10} polychloro derivs., having an approx overall empirical formula of $C_{10}H_{10}Cl_6$. Produced by the chlorination of camphene to 67-69% chlorine by weight and made up of compounds of $C_{10}H_8Cl_{10}$, $C_{10}H_8Cl_9$ (mostly polychlorobornenes) and $C_{10}H_{10}Cl_n$ (polychlorobornenes and/or polychlorotriclenes) with $n = 6$ to 9. Prepn: Buntin, U.S. pat. 2,568,471 (1951 to Hercules Powder). Isolat of components in crystalline form: Casida et al., *Science* 183, 520 (1974); *idem*, *J. Agr. Food Chem.* 22, 939 (1974). Acute toxicity data: T. B. Gaines, *Toxicol. Appl. Pharmacol.* 14, 515 (1969). Mutagenicity studies: N. K. Hooper et al., *Science* 205, 591 (1979). Livestock toxicity and tissue residues: L. Penumarthi et al., *Vet. Toxicol.* 18, 60 (1976). Reviews: Liebmahn et al., *Arch. Pflanzenschutz* 7, 131-150 (1971); F. Korte et al., *Pure Appl. Chem.* 51, 1583-1601 (1979); M. A. Saleh, *Rev. Environ. Contam. Toxicol.* 118, 1-85 (1990).

Yellow waxy solid, mp 65-90°. Pleasant piney odor. Vapor pressure at 20°: 3×10^{-7} mm Hg, d^{20}_4 1.630. Log partition coefficient in octanol/water 6.44. Dehydrochlorinates in the presence of alkali, prolonged exposure to sunlight, and at temps about 155°. Soly in water: 3 mg/l. Freely sol in aromatic hydrocarbons. Corrosive to iron. LD₅₀ in male, female rats (mg/kg): 90, 80 orally; 1075, 780 dermally (Gaines).

Caution: Potential symptoms of overexposure are nausea, confusion, agitation, tremors, convulsions and unconsciousness; dry, red skin. See NIOSH Pocket Guide to Chemical Hazards (DHHS/NIOSH 90-117, 1990) p. 62. See also *Clinical Toxicology of Commercial Products*, R. E. Gosselin et al., Eds. (Williams & Wilkins, Baltimore, 5th ed., 1984) et al., pp 386-387. This substance may reasonably be anticipated to be a carcinogen: *Seventh Annual Report on Carcinogens* (PB95-109781, 1994) p. 390.

Use: Insecticide. Compare Strobane. Not recommended for use in dairy barns or on milking animals (Penumarthi).

9694, Toxiferine I. C-Toxiferine I. $[C_{20}H_{28}N_2O_2]$. From calabash curare: Schmid, Karrer, *Helv. Chim. Acta* 30, 1162 (1947); from *Strychnos toxifera* Schomb. *Loganiaceae*: Wieland et al., *Ann.* 547, 156 (1941); Kling, *J. Chem. Soc.* 1949, 3263. Identity with toxiferine V and toxiferine

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